3-2-01

MEMORANDUM

SUBJECT: **Oxadiazon.** List B Reregistration Case 2485. PC Code 109001. **Product Chemistry Chapter for the Reregistration Eligibility Decision [RED] Document.** DP Barcode D273104.

FROM: K. Dockter, Chemist
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THRU: Alan Nielsen, Branch Senior Scientist
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TO: Nancy McCarroll, Risk Assessor
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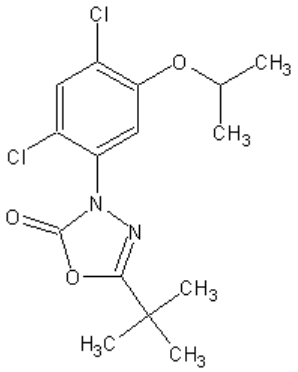
Oxadiazon [2-tert-butyl-4-(2,4-dichloro-5-iospropoxyphenyl) ▲^{2}-1,3,4-oxadiazolin-5-one**]** is a preemergence, early postemergence herbicide registered to control annual grasses and broadleaf weeds.



Chemical structure by J. Punzi

Empirical formula: $C_{15}H_{18}Cl_2N_2O_3$
Molecular weight: 345.2
CAS Registry No.: 19666-30-9
PC Code: 109001

A search of REFS conducted 2/14/01 identified a single oxadiazon MP registered under PC Code 109001, the Aventis Cropscience USA LP 94 % technical [T]; EPA Reg. No. 264-450. There are 47 active end use products. Only the Aventis 94% T is subject to a RED.

The product chemistry data base is complete. However, the current Confidential Statement of Formula [CSF], dated 4/7/78, is inadequate. Nominal concentration and upper limit must be stated for all components. Additionally, the lower limit must be stated for the a.i. The CSF must be executed by the current registrant. The Series 830 physical and chemical properties are given in the table below.

GLN		MRID	Data
6302	Color	jacket	white
6303	Physical state	"	crystalline pwd.
6304	Odor	"	odorless
7200	MP	"	90 C
7300	Bulk density	41565701	1.3 g/mL
7840	Water solubility	jacket	0.0007 g/L @ 20 C
7950	vp	41230301	7.76×10^{-7} mm Hg [gas satn.]
7550	P_{ow}	41230302	log P = 4.91
6313	Stability to normal and elevated temperatures, metals, and metal ions	41877601	stable for 30 days @55 C; stable in presence of aluminum, iron, & tin pwds. But >5% loss in presence of ferric chloride.

Bibliography

41565701 Chabassol, Y.; Hunt, G. [1990] Oxadiazon-Specific Gravity and Density at 20 C: Study No. 89-15. Unpublished study prepared by Rhone-Poulenc Ag Co. 16 p.

41230301 Hoffman, M. [1989] Vapor Pressure Determination of Oxadiazon: Project No. HLA 6001-372. Unpublished study prepared by Hazelton Labs. America, Inc. 71 p.

41230302 Seymour, R.; Hall, L. [1988] Octanol/Water Partition Coefficient Determination for Oxadiazon; Report No. 40434. Unpublished study prepared by Rhone-Poulenc Ag Co. 12 p.

41877601 Sanders, J. [1991] Oxadiazon, Technical - Determination of Stability; Lab. ID 4053-91-0061-AS. Unpublished study prepared by Ricerca, Inc. 102 p.

cc: List B file, SF, RF, Dockter, N. McCarroll, S. Piper, S. Tadayan.
RD\I TB/CEB/RRB2 Oxadiazon RED Team.
7509C:RRB2:Rm712N:57886:KD/kd
Oxadiazon RED [9856_1] = D273104.RED.wpd.